

For Timex/Sinclair EnthusiastsPublished by WMJ Data Systems

* * Volume 2, Number 4 * *

From the Desk of Bill Johnson

As you probably know by now this is our last issue. I would like to thank all of our readers and writers. In the past few months we have received many letters telling us that QuarTerS will be missed. To these readers we would once again suggest Time Designs Magazine, ad elsewhere in this issue.

If we still owe you issues please turn to the inside back cover for information on the amount of credit you will receive. Of course the credit can be mailed back to us for a refund check or can be used on any purchase from one of our catalogs. We have two catalogs one specifically for the Timex/Sinclair machines and one for other computers. We have enclosed a copy of our latest Timex/Sinclair catalog with this issue. If you wish our catalog for other computers please let us know. We would prefer that you use the credit for merchandise as we have a fairly large stock of Timex/Sinclair products.

In the last issue I mentioned that we will still be supporting the Timex/Sinclair computers through our catalogs. The only way to consistently receive our catalogs is if you have made a purchase from us with in the past year. We still offer very quick service. Almost all Timex/Sinclair orders we receive are shipped the same day we receive them. Depending on where you live you should receive your orders within 5 to 10 business days from the time you mail it. Of course we do run out of some items but usually have them on order even before we receive your order.

We look foward to serving you in any way we can.

Sincerely,

William M. Johnson
President
WMJ Data Systems

OWN ANOTHER COMPUTER???

Do you have an...

APPLE

ATARI

COMMODORE

IBM PC/PCjr

IBM COMPATIBLE

TIMEX/SINCLAIR

TRS-80

IF YOU OWN ONE OF THE ABOVE COMPUTERS
WHY NOT SEND FOR A COPY OF OUR LATEST
CATALOG, 28 PAGES OF DISCOUNT SOFTWARE.

WMJ DATA SYSTEMS
4 Butterfly Drive
Hauppauge, NY 11788
(516)543-5252

Joanna Cohen
POB 1240
Mendocino, 95460

November 25, 1986

Ms. Carolyn Bower
560 Catalina Ave
Wooster, OH 44691

Dear Carolyn Bower,

I read your letter to QuarTerS with interest. I have used my TS2068 for my business for about two years.

My equipment includes an 80 column printer, RGB monitor, Aerco disc drives and i/fs and the 2050 modem. I have quite a bit of software including Mscript and an accounting programme called Personal Accounting. Both of these programmes have been modified for disc by Jack Dohanne. If you are not using Jack's V 5.0 version of Mscript (which he puts out in tape too) then you are not getting the full value of the programme. Jack very kindly modified Personal Accounting for me so as to fit my business needs. I use Mscript for inventory, etc. as it has global search and I can find info. very quickly.

With regards to VuCalc and other programmes what you need is the relocatable print driver programmes Jack puts out. In some cases I have been able to use the print driver programme that comes with the Aerco print i/f. Is this the printer board you have?

If so, if the driver is loaded first then it will work with many programmes and in fact can be incorporated in some.

I couldn't function in the business without the disc drives and consider the money very well spent when I work out the time and frustration saved!

Hope the above helps and let me know if I can help you.

Sincerely,



J. Cohen

cc QuarTerS
LITTON
FOR PUBLICATION

Very sorry you're not publishing anymore!

JOYSTICK APPLICATIONS
By: John Deering, DEERING IMAGINEERING

With the many fine GRAPHICS or DRAW programs available for virtually all TIMEX/Sinclair computers, I have found the 'ole joystick' by itself can not easily respond to many of the demands placed upon it. To draw rather acute or obtuse angles, draw objects or do script writing, a ROLLER control is much easier with which to work. Atari & WICO both make excellent models, with the latter offering wiring configurations for TI, Apple, Radio Shack and Odyssey. I guess they figured the Atari compatible user would opt for the Atari offering.

And lest I forget, an Apple-user friend of mine, who owns a FAT-MAC has recently replaced his MOUSE with a ROLLER. He found the MOUSE was picking up dust particles on his desk, thereby causing malfunctions; he hasn't experienced this with a ROLLER.

Since I own a QL, TS 2068 (pretending to be a Spectrum), and a TI-99/4A, I had several reasons for wanting a ROLLER connected to each. My son's Atari, for some reason wouldn't work with the TIMEX/Sinclair machines, plus he 'wiped-out' my TIMEX stick while playing ZAXXON one day.

Naturally, I'm kind of cheap (can't you tell) and purchasing two ROLLERS was just not in my plans, so I made my very own WICO (TI version) adaptor to work with the TIMEX/Sinclair machines.

First, I took the old TIMEX stick and cut the 9 pin DIN plug with about 3' of cable. I then stripped each of the 6 wires, plugged in the cable, loaded TECH DRAW, JR and started touching wires together to see which color did what. I then examined the female 9 pin DIN plug on the WICO to see which 6 were being used. After about an hour or so I had the two working very nicely, albeit temporarily together. To make a permanent situation, I would have to purchase another female DIN.

Luckily, K-Mart, among others, is running 'Fire-Sales' on ALL game hardware-software-in between ware, I picked up an Atari extension cable for \$1.40 (times are really hard). I then cut the female Din with about 3' of wire and decoded the wire colors to corresponding pins via a volt ohm meter. After mating the two ends together, I now have the WICO ROLLER (TI version) working very well on the TIMEX and Sinclair machines. Here' the breakdowns:

TIMEX wiring-> ORANGE=fire BLACK=ground WHITE=up GREEN=left
BROWN=right BLUE=down

ATARI Extens-> PURPLE=ground YELLOW=down GREEN=up RED=right
ORANGE=left BLACK=0 BROWN=0 WHITE=0 BLUE=0

TIMEX to Atari extension (Texas Instruments Style)

{ See diagrams also }

TIMEX end

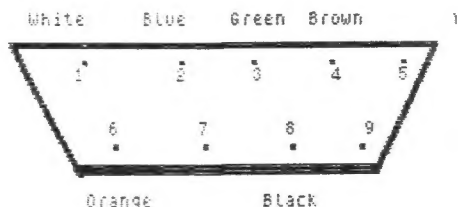
ATARI end

ORANGE-----	->RED
BROWN-----	->BLUE
GREEN-----	->BROWN
BLACK-----	->BLACK
BLUE-----	->PURPLE
WHITE-----	->ORANGE

To decode other computer wiring configurations, this is ONE method, the other is not quite so obvious. Get out the technical service manual and check out the schematics, or for the really adventurous, disassemble your STICK or ROLLER.

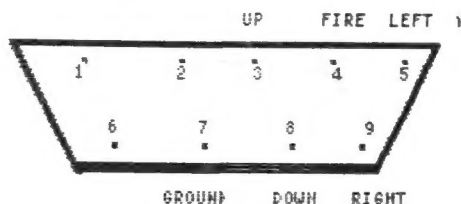
For QL users with ICE...wait till you use a ROLLER with this.... FANTISTIC...it beats the MAC with MOUSE hands down.

TIMEX/SINCLAIR Cable Diagram



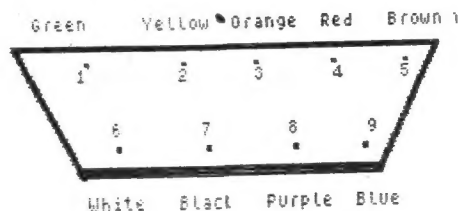
9 Pin DIN (MALE) PLUG

TI-99/4A Cable Configuration



9 Pin DIN (FEMALE) PLUG

ATARI Extension Cable Diagram



9 Pin DIN (FEMALE) PLUG

READ as though facing plug...

DEERING IMAGINEERING...

* SECOND ANNUAL MIDWEST TIMEX-SINCLAIR COMPUTER FEST *

Hello! Thanks for your recent inquiry concerning the 1987 Computer Fest. Please pardon if there has been some delay in my getting back with you. There is going to be a 2nd annual Timex Sinclair Computer Fest. This time we'll host it at Indianapolis, Indiana. The date is set for the first weekend of May 1987, both Saturday and Sunday. If there is enough interest shown, there will be a banquet and organizational meeting held on Friday night for the vendors and the leaders of the TS Users Groups that are represented at the Computer Fest. This would give those involved a chance to further the future of our beloved computers and to get to know each other a little better.

We do have facilities available to house the Computer Fest, but are presently looking for larger and better facilities. We soon found out at the last Computer Fest, held last year in Ohio that we were crowded. So, in order to enhance your visit to the 1987 Midwest Timex Sinclair Computer Fest we want the best, yet inexpensive facilities available.

By holding the Fest in Indianapolis we will have better airport service for those flying in for the Fest. The airport is located on the freeway circling the city, so cab and shuttle service will be easier and cheaper than it was at the last Fest. It also gives another area of the Midwest a chance to host the Midwest Timex-Sinclair Computer Fest.

Future updates on the Computer Fest can be found on the Indiana Sinclair-Timex Users Group Bulletin Board. It operates 24 hours, 7 days a week. Warm up your modem and call 317-898-3903. This may also be accessed by non-Sinclair computers.

In the coming months you will begin to see more news about the Fest in the TS specific magazines. You will also see forms to send in for advanced registration. We hope to see you there with all your friends and family. Thank you again for your inquiry.

Sincerely,
Frank Davis

* **1987 MIDWEST TIMEX / SINCLAIR COMPUTER FEST** *
May 2 - 3

Place: Holiday Inn North in Indianapolis, Indiana

Dealer and Seminar Speaker Banquet: Friday, May 1, at 8 PM

Fest times: Saturday May 2 — 9 AM to 6 PM
Sunday May 3 — 9 AM to 5 PM

Ralph McCrum
P.O. Box 1161
Mishawaka, IN 46544

In the preceding issue of QuArTERS we pointed out how SCREEN\$ sees various characters and learned that it recognizes only those having an ASCII code of 32 to 127. In this lesson, we digress from Print Position to learn more about how to program around some of these short comings.

First of all, consider the use of SCREEN\$ in SAVEing a screen display to tape. The manual on page 160 gives the format as:

SAVE "DISPLAY" SCREEN\$

And on the following page there is a format for recalling the display:

LOAD "DISPLAY" SCREEN\$

Now if you were to use these commands on a screen display made up of all sorts of characters and color, you would find that SCREEN\$ appears to read everything on the screen correctly, as the screen is recalled in all of its glory. Not so. What really happens is expressed by the two alternate, following commands:

SAVE "DISPLAY" CODE 16384,6912
LOAD "DISPLAY" CODE 16384,6912

The preceding SCREEN\$ commands were only incorporated in the computer for convenience in a SAVE or LOAD operation. This becomes apparent in a store and recall operation involving the computer's own memory. To demonstrate, enter and run the following routine, lines 100 to 250, inclusive:

```
100 FOR R=0 TO 21: FOR C=0 TO 3
110 LET T=AND
120 IF T>.2 THEN PRINT PAPER 7*
AND:AT R,C:CHR$ INT (91*AND+32)
130 IF T<.2 THEN PRINT PAPER 7*
AND:AT R,C:CHR$ INT (14*AND+129)
140 NEXT C: NEXT R: STOP

200 LET a$=""
210 FOR R=0 TO 21: BEEP .005,1
220 FOR C=0 TO 31
230 LET a$=a$+SCREEN$(R,C)
240 NEXT C: NEXT R: CLS
250 STOP : PRINT a$
```

The program will come to a STOP at line 140, allowing you to see a screen display made up of various characters including graphics and PAPER color. About 20 percent of the screen is covered by graphics. Now, by direct entry, use CONT - ENTER. Have patience. It takes about 30 seconds in basic for SCREEN\$ to read and record the display in a\$. After the screen is recorded, the routine will do a CLS. The next REPORT will be the STOP at line 250. Again use CONT - ENTER and a\$ will be printed out on the screen. But note. We have "lost" all of the graphics because SCREEN\$ did not see these symbols.

Now, if we are to remain in basic and store the FULL screen display in memory, replace lines 200 to 250 by the following lines 300 to 370:

```
300 DIM a(6912): LET T=0
310 FOR n=16384 TO 23295
320 LET T=T+1: LET a(T)=PEEK n
330 NEXT n: CLS : STOP

340 LET T=0
350 FOR n=16384 TO 23295
360 LET T=T+1: POKE n,a(T)
370 NEXT n
```

Again run the program and generate a screen display of various characters and color. When the STOP report of line 140 comes up, direct enter CONT. Have more patience. It takes nearly two minutes to read all 6912 bytes that make up the full screen with its ATTRIBUTES. As soon as the screen is stored in memory, the screen will do a CLS and a STOP report, line 330 comes up. Again CONT by direct entry. The screen build-up that follows shows the order in which the display file was stored in memory. And, in this instance, everything has been recalled including graphics and color. So far, so good. But it takes nearly two minutes to store and two minutes to recall a full screen in basic. This would never allow us to employ this method for, say animation.

cont'd

Let us digress further, for the time being, and resort to a short machine code routine that transfers blocks of data quite rapidly. Delete lines 300 to 370 and add line 10 and 400 to 1000. The resulting routine looks like this:

```

10 CLEAR 58431: GO SUB 1000
100 FOR R=0 TO 21: FOR C=0 TO 3
1
110 LET T=AND
120 IF T>.2 THEN PRINT PAPER 7+
RND;AT R,C;CHR$ INT (91*RND+32)
130 IF T<.2 THEN PRINT PAPER 7+
RND;AT R,C;CHR$ INT (14*RND+129)
140 NEXT C: NEXT R: STOP

400 RANDOMIZE USR 58432: CLS :
STOP
410 RANDOMIZE USR 58444: STOP

1000 REM ** M.C. Routine
1010 FOR n=58432 TO 58455
1020 READ a: POKE n,a: NEXT n
1030 RESTORE 1040
1040 DATA 17,88,228,33,0,64,1,0,
27,237,176,201
1050 DATA 17,0,64,33,88,228,1,0,
27,237,176,201
1060 RETURN

```

Run the program and again develop a full screen of color and various characters. When the STOP report of line 140 comes up, enter CONT again. The machine code routine triggered by line 400 will almost instantly read and store the screen, and then do a CLS. The program will then come to a STOP, line 400.

Now CONT again. Almost instantly the full screen returns with the graphics and color. Such speed allows this method to be used for animation, but the 6912 bytes per full screen may consume too much RAM for a long, meaningful program, containing many screens. If so, consider animation that may need only a horizontal third of the screen. This would cut the storage requirements considerably. Refer back to the slow basic routine that used lines 300 to 370. Its action upon recall illustrates the order in which the screen builds up, both in basic and m.c. We need only select the proper beginning and ending addresses for the characters and ATTRIBUTES. But a word of caution. If only a third of a screen is considered, the block of characters and the block of ATTRIBUTES may not be consecutive. This means storing and recalling separate blocks.

Timex / Sinclair Owners...
TAKE A LOOK!



**TIME DESIGNS
MAGAZINE**

FOR YOUR
2068 - 1000/1500 - SPECTRUM

- * Readers nationwide (and Canada too!)
- * 36 Illustrated Pages
- * Published "On Time"
- * Interesting Articles / Programs
- * Current Information
- * Exclusive "T/S Shopper" Guide

**ONLY
\$15 year
SIX ISSUES**

SUBSCRIBE TODAY!

SAVE \$3.00 Off Newsstand Price. Send Coupon (or a copy) with Check or Money Order for \$15 (U.S. Funds Only) to address posted below. We will start your subscription right away upon receipt of your order.

TIME DESIGNS MAGAZINE COMPANY
29722 HUR RD • Colton, Oregon 97017

Name _____
Address _____
City / State _____ Zip _____

CTM

"...received my moneys worth with just one issue..."

—J. Trenbick

"...always stop to read CTM, even though most other magazines I receive (and write for) only get cursory examination..."

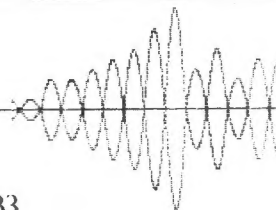
—Fred Blechman, K6UGT

U.S.A.	\$15.00 for 1 year
Mexico, Canada	\$25.00
Foreign	\$35.00(land) - \$55.00(air)
(U.S. funds only)	
Permanent (U.S. Subscription)	\$100.00
Sample Copy	\$3.50

CHET LAMBERT, W4WDR

1704 Sam Drive • Birmingham, AL 35235
(205) 854-0271

SyncWare News



P.O. Box 64
Jefferson, NH 03583
Telephone: 603-586-7734

Name _____
Street _____
City/St/Zip _____

Payment

☐ check ☐ VISA ☐ Master Card

Card # _____ Expires _____

- ☐ Send me 1 year of SYNCWARE NEWS!
Enclosed is \$16.95
- ☐ I want the BEST OF SYNCWARE vol.1
All of last year in one big volume.
ONLY \$16.95

Do you find yourself looking for good, solid information for your Timex Sinclair computer? Do you want to know what makes it tick? Are you looking for new software, books, hardware or better yet, slicker ways to do your own programming? A YES answer to any of these questions is reason enough to subscribe to the SyncWare News. SWN is not a newsletter, but it is a journal for your machine. We try to explain the logic behind algorithms and not just give a program listing. We have advanced and beginning tutorials in a variety of areas. Our format is changing and upgrading, to provide easier, more appealing reading for everyone. If you're wary of wasting your money, \$2.00 will bring a sample issue for your perusal. We at SWN like our new direction, and we are sure that you'll agree.

Do you have a program or product for sale? Would you like to tell others about a service that you can perform? Drop us a line and we will tell others.

Subscribe !

1 year (6 issues)

\$ 16.95

Add \$3 a year in Canada; all other foreign add \$5 per year.

WMJ DATA SYSTEMS
4 BUTTERFLY DRIVE
HAUPPAUGE, NY 11788
(516)543-5252

The following items are not listed in our current
Timex/Sinclair catalog and may be of interest to our
customers:

THE HACKER'S HANDBOOK
Only \$9.95 post paid.

TS2068 TECHNICAL MANUAL - This manual is a must for any
TS2068 owner.

Only \$25.00 post paid.

EPYX 500XJ JOYSTICK - for the TS2068.
Only \$19.95.

PANASONIC KX-P1080i DOT MATRIX PRINTER
120 CPS in Draft Mode
24 CPS in NLQ Mode
EPSON Compatiable
Suggested Retail is \$329.00
Your price is only \$249.00 post paid.

PANASONIC KX-P1091i DOT MATRIX PRINTER
160 CPS in Draft Mode
32 CPS in NLQ Mode
EPSON Compatiable
Suggested Retail is \$429.00.
Your price is only \$325.00 post paid.

All prepaid orders are post paid. Send check or money
order to address above. COD phone orders accepted with
purchaser paying all shipping and COD charges. All orders
shipped UPS Ground so please supply us with a UPS address,
no P.O. Boxes. Most orders shipped same day received, if
demand is large for a particular shipment may be delayed up
to 2 weeks. We also supply software for the following
computers: Apple, Atari, Commodore 64/128, IBM...

Thank you for your order!

CREDIT FOR ISSUES STILL DUE

Determining the amount of your credit:

Check the mailing label that is located on the back of this issue of QuarTerS. In the upper left hand corner you will find either 'QTS' or a number. If your label has a 'QTS WINTER-87' than this was the last issue due you. All other labels will have a number and the last issue due, such as '3 FALL-87'. This means that the last issue due to you was the Fall 1987 issue and the '3' means that you have 3 issues due (Spring 1987, Summer 1987, and Fall 1987). To calculate the credit due you simply multiply the number in the upper left hand corner by \$2.00 and this will determine the amount due you.

Please fill out the form below and return it with your order to WMJ Data Systems, 4 Butterfly Dr, Hauppauge, NY 11788. If you are ordering items that total more than your credit please include a check or money order for the difference. Any unused credit will be refunded by check.

QuarTerS CREDIT

Number of issues due: _____

Multiply by \$ 2.00

TOTAL CREDIT \$ _____

Please check one:

() I wish to use this credit for merchandise, I have enclosed my order.

() I wish a refund check

Your mailing label should appear on the other side of this form.

This CREDIT must be returned to WMJ Data Systems, 4 Butterfly Drive, Hauppauge, NY 11788 with your request. There is no deadline for the use of this credit. This credit may be used any time in the future.

ACZ GENERAL LEDGER

"A small business accounting system"

A true double entry system that has the benefits of a manual ledger without the drawbacks. The program identifies transactions that do not balance and gives you the opportunity to make corrections. It will not post out-of-balance transactions, so the books always balance.

1. ACZ GENERAL LEDGER for the TS1000, TS1500 and Sinclair ZX81 all with 16K memory. This version allows 50 Balance Sheet accounts, 50 Income Statement accounts and processes 400 entries and accounts per session. Prints transactions and the three fundamental financial statements: Income Statement, Balance Sheet, and Owners Equity. Originally sold for \$29.95. Now only \$19.95.

2. ACZ GENERAL LEDGER 2.000 for the TS2068. The financial statements feature a flexible design, so the reports fit your business whether it is a proprietorship, partnership, or corporation. And there's plenty of capacity with up to 100 named accounts, and up to 800 entries and accounts each month. Prints the following reports: Year-to Date Income Statement, Monthly Income Statement, Balance Sheet, Trial Balance, Ledger Detail, Journal Entries, and the Chart of Accounts. Originally sold for \$39.95. Now only \$19.95.

WMJ DATA SYSTEMS

4 BUTTERFLY DRIVE

HAUPPAUGE, NEW YORK 11788

RETURNED TO SENDER
FORWARDING ORDER HAS EXPIRED, PLEASE USE ADDRESS PROVIDED
WINTER-87
BOATWRIGHT
BOX 431
OR 97914



BOATWRIGHT
Rt 1 Box 697
Ontario, Or. 97914